Collection no. 167 — New Guinea

K.H.L. Key & J. Balderson — 1

16.viii – 1.ix.1970

16/8. Port Moresby. Collected on hill (within town). Steep slopes, with rock outcrops. A broad & coarse-leafed (E. papuana?) tree. Up to 15ft with dense grass to 3ft, some broken down & some burnt. Scattered shrubs to 5ft in places. Grass mainly quite dry, but green in seepage places, where with a few forbs. Acrida (j.) mainly in dense & tall grass. Aiolopus & Heteropternis on short grass at seepage spots & roadsides, Abractomorpha ditto but on forbs. Valanga on shrubs.

Paga
Austracris procima, A. guttulosa, Valanga irregularis, Stenocatantops angustifrons, Heteropternis obscurella, Aiolopus thalassinus, Atractomorpha similis

17/8. Collected around University. Flat, with E. conferta & E. alba on pale grey friable soil. Grass pasture mostly mown to 6in, scattered forbs; partly dry, but greening along a small gutter.

Aiolopus thalassinus, Atractomorpha similis

18/8. Behind shore-line, eastward

Desmopterella sp., Stenocatantops angustifrons, Atractomorpha similis (j).
from Davara to ?Koke. Grass + forbs
6in to 2ft at base of step hill.
Desmopterella (also nymphs) among
dead leaves from Casuarina equiseti-
folia + other non-eucalypt trees.
Austracris guttulosa, Valanga sp.,
Aiolopus thalassinus.
[N.B. In all collecting around Port
Moresby, A. guttulosa was abundant
as adults in long grass; no nymphs.
Valanga sp. was rare, most adults
being old + worn (one teneral), + a
few nymphs of Valanga or A. ?proxima
about. Heteroptemis + Aiolopus
present as both adults + nymphs,
also Atractomorpha + Desmopterella.
Stenocatantops angustifrons
abundant, especially when forbs
present; no nymphs.]
19/8. (1) Bomana cemetery. Savannah
woodland of E. confertiflora + E. alba

Gastrimargus musicus, Desmopterella sp. 3
with dense grass to 3ft (dry), also
Atractomorpha similis
the same cleared, burnt, + cut to
6 in. Gastrimargus, in last, Stenocatantops & Aiolopus
ops nitripennis + Austracris ~~proxima~~ Suttulosa
in first.

(2) Margin of rainforest opposite a leak
Rectitropis sp., Heteropternis obscurella,
plantation on road to Brown River.
Desmopterella sp., Hedotettix amplus
Rank decid. growth, margined by
grasses to 18in, + edge of forest, with
angustifrons.
fallen leaves + regrowth. Stenocatantops

(3) Brown River picnic spot. Rainforest +
+ forbs Desmopterella sp., Rectitropis sp.,
grass/following clearing of it, also
Oxya gavisa, Heteropternis obscurella,
mowed grass under rainforest
Atractomorpha similis, ground + Stenocatantops
remnant, + damp/mud margining
angustifrons, S. nitripennis, Austracris
a pool 30ft across + the river.
proxima, Paratettix histricus, Eucriotettix sp.
Tetrigids on damp ground, Desmopterella
Loxilobus sp., Hedotettix amplus, H. bolivari
among fallen leaves, Heteropternis in
grass along road. Agroeciine in an
outside toilet.

20/8.

29089.2. Brown R. - Logeri fork.

Stenocatantops angustifrons,
102.6. Roma Falls look-out. E. to 20ft, Austracris proxima papuana & Cycas & grass to 2ft. Step Heteropternis obscurella slopes with large conglomerate outcrops.

104.3 Roma P.O.

Gastrimargus musicus 600–1700ft.
109.8 Ray Straatman's place (Koitaki area). Fringing rainforest along creek, Resoptarella sp., Rectitropis sp., Oxya gavisa, Austracris proxima, Stenocatantops angustifrons with weeds, etc. to 2ft. Return. Atractomorpha similis

111.8. Sarowari school. Turn left.

117.7. End of road at eastern end of Sogeri Plateau. Return.

118.8. E. terricornis to 6ft, E. papuana to 20ft on hilly country of Plateau. Grass Acrida conica, Gastrimargus musicus Stenocatantops dentata, vittipennis, to 2ft, Banksia sp. to 6ft, occ. patches Heteropternis obscurella bare ground with fallen eucalypt leaves & bark. Some forbs & small shrubs, much hard fern to 18in. Soil bright red to chocolate (laterite?).

119.9 E. terricornis to 50ft & E. papuana to 30ft on hilly country, with grass

Acrida conica (J), Gastrimargus musicus,
to 18in, Banksia occ. to 5ft, dry fern &
Heteropternis obscurella, Rectitropis sp.,
bracken to 1ft, occ. Melaleuca sp. Large
Atractomorpha similis
patches fallen leaves & branches of
eucs & Banksia.

29122.4. Cleared from rainforest on
Desmoptera sp., Rectitropis sp.
hilly country with red-brown friable
soil. Regrowth of various trees in
open stand, with Imperata & other
grasses to 2ft, forbs, & dry fern. Gastr.
123.7. Low school.

22/8.

29231.2 Komdobu P.O.

234.2 Tatana causeway

239.8. Turn off to Idlers Bay.

244.8 Idlers Bay picnic area. Narrow
Austrocynops guttalbia, A. proxima
flat behind beach, with shrubs & small
Stenocatantops angustifrons
trees & Pandanus to 15ft, grass (mainly
Themeda) of varying density to 3ft, various
forbs & creepers, leading to steep hill
slope with E. papuana well spaced
to 15ft & dense Themeda. Return.

248.1. Undulations with large stones
Austracris guttulosa, A. proxima
E. confertiflora + E. alba to 20ft in sav.
Stenocatantops vitripennis
woodland, with occ. Melaleuca sp. to
15ft + Melaleuca regrowth to 2ft. Mainly
fairly dense Themeda to 2ft., in places
somewhat open. No forbs.

~250.0. Turned left on hea hea road.

253.7. Black soil (self-mulching) flat,
Austracris guttulosa, Stenocatantops
bordered by occ. sav. woodland + ~~[illegible]~~
vitripennis
with a shallow watercourse bordered
by shrubs + small trees (remnant of
gallery forest). Themeda + other grasses
dense to 3-4ft.

260.0 Margin of saline flat bordering
Austracris guttulosa, Stenocatantops
mangroves. Bare mud + soil, short grass
angustifrons, Aiolopus thalassinus,
patches to 6in with some low samphire
Heteropternis obscurella
to 6in, bordered by Themeda + other grasses
to 18in + occ. Pandanus. Return.

281.3 Koki depart.

286.2 Turned left at fork.

288.9 Turned right on hipo road.

295.1. Turn-off to Loloata.

295.5. Turn round.

297.1 Loloata. Dense growth of shrubs + small trees, including an Acacia to 30ft, with Pandanus to 12ft, patches coarse grasses to 4ft., bordering a mangrove-filled inlet. Narrow flat leading to steep slope.
Austrocrex proxima, Stenocatantops angustifrons, Aiolopus thalassinus

297.7. Back on road. Turned for P.M.

299.1 Entrance to Bautama mission. Gallery rainforest along creek, with adjacent lush grass + leading to 3ft grass + E. papuana on gentle slope.
Oscya gavisa, Desmopterella sp, Stenocatantops angustifrons, S. vittifennis, Hedotettix emplus, Eucriotettix sp.

[NB. The above route is not the normal one to the Rigo road.]

23/8.

21031.2. University. Themeda + other grasses to 3ft dense, with dist. regrowth along margin of gallery forest along small creek. A. guttulosa, A. proxima. Also Themeda dense to 3ft among E. confertiflora + E. alba to 20ft. on flat plain with dark

grey soil.

032.3. Turned right.

Stenocatantops, vitripennis, S. angustifrons,
034.4. Mwangaie Swamp. E. Conferteflora
Austracris proxima, Desmopterella sp.,
+ E. alba to 50ft in low-lying area
Eucriotettix sp.
with Pandanus to 15ft, + grasses to 4ft.
Areas to 3ft,
a few tall shrubs + forbs, bordered by
Tenuida dense to 3ft. A. gutt., S. vitrip.
Black self-mulching soil on limestone
at depth.

040.0. University (washed some mileage).

049.5. Laloki R. on Brown R. road.

050.8 Rainforest along shallow
Gastrimargus musicus (j), Atractomorpha
backwater of Laloki River, containing
similis, Rectitropis sp. (j), Stenocatantops
a small amount of water surrounded
vitripennis, S. angustifrons, Heteropternis
by a broad area of mud, leading to
obscurella, Acrida to 2-3ft, conica (j), Hedotettix
dense Imperata, partly burnt over +
amplica, H. bolivari, Locustana sp., Eucriotettix sp.,
shooting to 18ins scattered forbs.
(1 or 2), Paratettix histricus, Eupanchettix sp., Austracris
Tetrigids swept from mud. Collected
proxima
also at light.

25/8. Dam. E. terebricornis + E. polycarpa
with occ. Melaleuca sp., * Acacia sp.,

Stenocatantops angustifrons, S. vittipennis,
~~[illegible]~~ & Pandanus. Very flat,
Austracris guttulosa, Rectitropis sp., Oxya gavisa,
swampy in places. Imperata & other
Atractomorpha similis, Acrida conica, Heteropternis
coarse grasses to 3-4ft, occ. shorter
obscurella, Desmopterella sp., Paratettix histricus,
& more open. Also margin of patch of
P. fasciculis
rainforest with creepers & coarse-leafed
ferns (Desmopterella here, also most of
Rectitropis).
Morning?
26/8. Collected in communities of Pullen's
Acrida conica, Goniaea vocans,
types 1, 3, 4, & 5, within 1-2 miles S.
Stenocatantops angustifrons, S. vittipennis,
of Morehead Patrol post (see attached
Caledia captiva, C. sp. 1, Heteropternis
descriptions of vegetation types). There
obscurella, Oxya gavisa, O. sp. 1, Rectitropis sp.,
was little marked differentiation
Atractomorpha similis, Erythrolomdea (?) amaena (f.),
in the distribution of grasshoppers
Macrotona sp. 21 (f.), Paratettix fasciculis
species relative to vegetation.
Goniaea was associated with all
communities except 5, Stenocatantops
vittipennis with all, Oxya, Rectitropis,
& S. angustifrons mainly with 1 &
3, Caledia spp., Heteropternis, &
Tetrigids with short grass verges to
roads. The nymphs of Macrotona sp.

was in 5, & that of ~~Cerodia~~ in 4.
Abundance of all species was low.
The specimens taken took 5 hr. of
collecting time of 2 people.

21/8. Morning. Collected from near
Oxya gavisa, O. sp. 1, Rectitropis sp., Heteropternis
eastern end of Morehead airstrip
obscurella, Paratettix distinctus, Stenocatantops
eastwards through Imperata dense
mitrifennis, Goniaea vocans, Austracris sp.,
& nearly pure to 4 ft on flat cleared
Acrida conica
from eucalypt forest, then through
Pullen's vegetation communities 4 &
5, returning through eucalypt
forest & patches of rainforest & bamboo.
Austracris in Imperata, Goniaea in
4.

Afternoon. Collected along river
Oxya gavisa, O. sp. 1, Caledia captiva, C. sp. 1,
frontage for ca. ¼ mi NE. from Morehead.
Desmopterella sp., Rectitropis sp., Calephorops
Lush short & tall grass & reeds
viridis, Gesonula mundata, Locicobus sp.
bordering river, leading to rain
forest with bamboo. Calephoropos
& Caledia spp. amongst the shortest
grass to 1 ft; often 6 in. Oxya,

brachypterous oscine, & Gesomela in medium to tall grass & reeds, Rectitropis mainly on rainforest margin, Desmopterella & Loxicolus among fallen leaves of bamboo with small patches bare ground.

28/8(1) Various patches of rainforest between Ronku & ca. ½ way to Ureum. Tetrigids, oscine, Desmopterella sp., Odya sp.! & Caledia at roadside on short grass & bare ground with fallen leaves.

(2) Forest to 60ft, with Melaleuca spp. (ca. dentata sp. (j)), Acacia sp., Terminalia sp., Banksia (to 12ft.), occ. Pandanus (acaulous), mixed open grasses to 2ft, Grevillea glauca to 15ft. Return.

(3) Low savannah woodland with Acacia glauca sp., Grevillia sp., Terminalia sp. & a few other trees to 30ft, Banksia dentata to 15ft, Melaleuca spp. to 3ft, plus a few shrubby plants to 3ft, Smoga to 2ft, various grasses & sedges or Restionacea to 18in.

dense + somewhat tangled. Winged phasmatid on Banksia, Macrotona amongst rough grass. Occ. E. confertiflora to 20ft. Soil pale grey fine sandy. Flat.

29/8. Site 1. Acacia sp., Melaleuca sp., E. confertiflora + occ. E. polycarpa to 40ft, with Grevillea + Banksia to 20ft + other small trees. Grass + sedges or Restionaceae to 1ft, Sinoga in patches to 1ft. regrowth of Acacia + Melaleuca to 3ft. [Ca. 5 mi. S. of M.]
Goniaea vocans, Caledia captiva, Rectitropis sp., Paratettix fenestralis

Site 2. From a point about 2½ mi. S. of Morehead, made a circuit to the NE, taking in forest, Melaleuca savannah woodland with Sinoga, + open grass plains, + patches of rainforest.
Goniaea vocans, Stenocatantops vitripennis, Oxya gavisa (j.), Locilobus sp.
Oxya gavisa, O. sp.!, Acesonula mundata, Caledja sp.!, Calephorops viridis

30/8. (1) Same as 29/8 "afternoon".

(2) Kunai grass, Paraflora vines, Acacia sp. regrowth between airstrip + native gardens, Morehead.
Eastrimargus musicus, Heteroptemis obscurella, Austracris sp.

29/8. Evening. Collected at light at edge of plain (= 26/8 "morning"). Banksia.

Loxiobates sff. (2).

Melaleuca sav. woodland, with Sinoga, grasses & sedges or Restionaceae.

Rectitropis brennerii

30/8 (3) Ca. 5½ mi. on NE. road out of Morehead. Roadside margin to rainforest.

[Overall abundance of many species was extremely low: 1 adult + 1 nymph (?) Tolgadia, 2 adults + 2 nymphs Macrotona seen, ca. 4 Gasomula seen, 2 nymphs Cervidia (?), 3 or 4 Gastrimargus seen. Two genera taken by Pullen in the general area were not found: Coryphistes + Pardillana. There was no indication that any of the species were represented by old "hangers-on" of the main population: hardly any were worn, some were teneral, & nymphs of most were present. Since by August the wet season was only recently over, & there was hardly any sign of wilting or dry

having of the herbaceous cover, it seems most unlikely also that the populations found were any sort of partial second generation. A few species may have died out completely as actual stage but even this seems unlikely.

The rainy season is said to begin in about late December & end about July. Only the area within 20 mi. of Monkhead was covered, & most work was within 5 mi. However, all the major habitats were sampled, including several good examples of the most Australian types.

Bivoella was searched for assiduously on marginal rainforest growth, as well as elsewhere, without result. The season may have been wrong, but this unlikely. Geographical location may be important apart from habitat, since Lutitropis

brunneri was found only at ca. 5 mi. NE. of Morehead, with the other species everywhere else.]

2/19 Hill behind Erma motel. Steep slopes & level road margins. E. papuana in savannah woodland, with grasses dense to 2'6", grass & forbs to 9" along road.

Stenocatantops angustifrons, S. vitripennis, Biolophus thalassinus, Austracris procera, A. guttulosa